IN THE CLAIMS

The following is a complete listing of the claims, and replaces all earlier versions and listings.

Claims 1-6 (Canceled)

7. (currently amended) A flared end structure of a metal tube to be pressed against a seat formed in a member by tightening a coupling nut to the member, having a joining end part to be pressed against the seat of the member, and a curved part continuous with the joining end part;

wherein the curved part has an curved outer surface with respect to the axis of the tube and a concave inner surface having a bottom edge, and

the curved outer surface merges into a flat surface of a neck part, on which the coupling nut exerts pressure, ~~of a neck part,~~

the flat surface of the neck part [[is]] being connected to an outer surface of the metal tube by a curved connecting surface having a center of curvature at a position radially outside the metal tube, and

a distance including a tolerance between the flat surface of the neck part and the end of the joining end part of the metal tube ~~meets~~ meeting an inequality:

$$L1 \leq L \leq L2$$

where

$$L1 = \{(D1 - D3)/2 + r\}/\tan(\alpha/2) + t/\sin(\alpha/2) + t$$

$$L2 = \{(D2 - D3)/2 - t\}/\tan(\alpha/2) + t/\sin(\alpha/2) + t$$

D1: Outside diameter of the metal tube

D2: Outside diameter of the flared end structure

D3: Inside diameter of the end of the flared end structure

r: Radius of curvature of the curved connecting surface

α: Cone angle of a cone containing the joining end part

t: Wall thickness of the tube.

8. (original) The flared end structure of a metal tube according to claim 7, wherein the flat surface of the neck part extends between the curved outer surface and the curved connecting surface.

9. Canceled